DOCUMENT RESUME

ED 246 353 CG 017 595

AUTHOR Waas, Gregory A.; French, Doran C.
TITLE Locus of Control as a Mediating Factor in Peer Social Status.
PUB DATE Apr 84
NOTE 21p.; Paper presented at the Annual Meeting of the American Educational Research Association (68th, New Orleans, LA, April 23-27, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Behavior Patterns; Behavior Problems; Children; Elementary Education; *Locus of Control; *Peer Evaluation; Peer Relationship; *Rejection (Psychology); *Sex Differences; *Social Status

ABSTRACT

Research has shown that children who are socially rejected exhibit classroom behavior problems and are at risk for adjustment dificulties in later life. To examine the relationship between locus of control for social relationships and peer social status, 413 fifth grade students completed positive and negative same-sex peer nominations, a same-sex peer rating, and a 17-item social locus of responsibility scale. Parents and teachers completed behavioral ratings. An analysis of the results showed that socially rejected children were more external in locus of control than either popular or average children. Among boys, external locus of control was positively related to problems on several behavioral dimensions. This relationship was not found among girls. These findings suggest that interventions should focus on the modification of external attributions of helplessness to facilitate the active use of problem-solving skills. (Author/BL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED246353

Locus of Control as a Mediating Factor in Peer Social Status

Gregory A. Waas and Doran C. French

University of Wisconsin-Madison

Paper to be presented at the annual meeting of the American Educational Research Association, New Orleans, April 1984.

CG 017595

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Gregory A. Waas

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Abstract

The relationship between locus of control for social relationships and peer social status was examined in the present study. Fifth grade students completed positive and negative same-sex peer nominations, a same-sex peer rating and a 17 item social locus of responsibility scale. Parents and teachers completed behavioral ratings. As hypothesized, socially rejected children were more external in locus of control than either popular or average children. Among boys, external locus of control was positively related to problems on several behavioral dimensions. This relationship was not found among girls. Implications for the development of interventions for socially rejected children are discussed.

Locus of Control as a Mediating Factor in Peer Social Status

Children who are rejected by their peers exhibit classroom behavior problems (French & Waas, 1984), and are at risk for a variety of adjustment difficulties during adolescence and adulthood. These include delinquency (Roff, Sells, & Golden, 1972), high-school drop-out (Barclay, 1966), military bad-conduct discharges (Roff, 1961), suicide (Stengel, 1971), and psychiatric disorders (Cowen, Pederson, Babigian, Izzo, & Trost, 1973). Researchers have attempted to delineate the characteristics of this population in anticipation that such knowledge will lead to the development of effective interventions for these children (French & Tyne, 1982).

Spivack and Shure (1974, 1982) report that socially rejected children exhibit deficits in social problem-solving skills. Specifically, these children are less competent than other children in generating alternative solutions to interpersonal problems and in specifying the sequence of steps necessary to solve these problems. Richard and Dodge (1982) report that rejected children's solutions are also less effective than other children's solutions. This reduced quality, however, appears only in their second and third solutions, rather than from their initial alternative solution. The emergent behavioral profile is one in which the rejected child initially tries an appropriate behavioral response to an interpersonal dilemma, but when faced with an obstacle, resorts to inappropriate solutions in

subsequent behavioral responses.

Derived from the above findings, the present study investigated the hypothesis that socially rejected children view themselves as less able to control social outcomes than popular and average children. A child that exhibits an external orientation is unlikely to persevere in generating alternative solutions when faced with obstacles because of their belief that social outcomes are not dependent on their own efforts. The present study predicted that socially rejected children would view peer relationships as being more externally controlled than would other children.

Past research attempting to apply locus of control to the child's social domain has been marked by limited and inconsistent results. For example, Nowicki and Rountree (1971) found no relationship between locus of control and sociometric nomination for friendship when using the Nowicki and Strickland (1970) locus of control scale for children. Smith, Tedeschi, Brown and Lindskold (1973) report similar results with an elementary-age population, using the Crandall, Katovsky and Crandall (1965) scale.

In each of these cases, however, it could be argued that there is an inappropriate match between the locus of control scale and behavior domain of interest. While both studies attempt to delineate the relationship between locus of control and sociometric popularity, Nowicki and Roundtree (1971) utilize a measure of generalized locus of control, and Smith et al. (1973) utilize a measure directed at

the academic-achievement domain. Lefcourt (1982), however, asserts that if one is interested in the application of the locus of control construct to clinical problems--where the highest precision possible is desirable--then measures specific to the clinical problem are needed. Studies utilizing such a domain-specific approach have supported the relevance of locus of control to the academic-achievement domain (e.g., Crandall et al., 1965; Crandall, Katkovsky, & Preston, 1962).

Recently, Dahlquist and Ottinger (1983) have reported the construction of a locus of control scale directed at children's perceptions of social interactions. Their findings suggest that popular children are more internally directed than isolated and rejected children. The present study replicate and extend the findings of Dahlquist and Ottinger (1983) by investigating the relationship between social locus of control and peer social status as well as parent and teacher behavioral ratings.

Method

The sample consisted of 413 fifth grade children attending rural elementary schools. Sociometric nomination measures were obtained by presenting children with a list of all same sex classmates and asking them to write the names of three classmates with whom they most liked to play. Students were then asked to write on another page the names of three classmates they least liked to play with. To compare nomination scores across groups, each score was converted

to a proportion score (Kane & Lawler, 1978). Popular children (N = 42, 10%) were those who scored .5 standard deviation above the mean for positive nominations and .5 standard deviation below the mean for negative nominations. Rejected children (N = 47, 11%) were those who scored .5 standard deviation below the mean for positive nominations and .5 standard deviation above the mean for negative nominations. Neglected children (N = 13, 3%) were those that scored .5 standard deviation below the mean on both measures. Children not meeting the criteria for one of the above categories were classified as average (N = 311, 75%).

A peer rating procedure (Asher & Hymel, 1981) was also administered to all students. Children were provided with a grid consisting of a list of all same-sex classmates along the side and drawn faces (smiling to frowning) representing a 5-point Likert scale across the top. Children checked the box that indicated the extent to which they liked to play with each child on the list.

Teachers completed the School Behavior Checklist (Miller, 1977) for randomly selected popular (N = 24), neglected (N = 11), and rejected (N = 20) children. This scale consists of 96 true-false items, and yields an overall behavior problem score and scores on six additional subscales: Low Need Achievement, Hostile-Isolation, Aggression, Anxiety, Extroversion, and Academic Disability. Parents were administered the Child Behavior Checklist (Achenbach, 1979) for randomly selected popular (N = 24), average (N = 22), neglected

(N = 4), and rejected (N = 24) children. The behavior-problem scales consist of 118 items that are rated using a three point scale. Only those scales scored for both sexes were included in the present analysis: Social Withdrawal, Depression, Somatic Complaints, Aggression, Delinquency, Hyperactivity.

The 17 item Social Locus of Responsibility scale was orally read to all students. This scale was constructed by adapting items of existing scales (e.g., Nowicki & Strickland, 1970; Rotter, 1966) such that they referred specifically to peer social contexts. The scale was shown to have adequate internal reliability (Chronbach's alpha = .70). This is comparable with other children's locus of control scales. The scale is keyed in an external direction; thus, higher scores indicate a greater frequency of endorsed external responses.

Results

Data were collapsed across sex because of the absence of sex main effects or sex by status interactions. Six planned Dunn comparisons ($\alpha = .05/6$) were conducted to investigate the hypothesis that social locus of control is a significant mediating variable of peer status. Table 1 presents the means and standard deviations of popular, average, neglected and rejected children on the Social Locus of Responsibility scale.

Insert Table 1 about here

As hypothesized, Dunn comparisons indicate that rejected children scored significantly higher than popular ($t = -6.95$, $p < .001$) and average ($t = -5.14$, $p < .001$) children, suggesting that rejected children manifest a more external orientation within the social domain. Dunn comparisons also indicate that popular students were significantly more internal than either average ($t = 4.07$, $p < .01$) or neglected ($t = 3.17$, $p < .01$) students. No differences were found between neglected children and rejected or average children. Neglected children did, however, score between rejected and average children as predicted.

Table 2 presents Pearson correlations between the Social Locus of Responsibility scale and subscales of the Child Behavior Checklist and School Behavior Checklist for each sex.

Insert Table 2 about here

For the Child Behavior Checklist, there is a consistent pattern of significant correlations between an external orientation and observed pathology among boys. This pattern is not manifested among girls. For the School Behavior Checklist, locus of control is related to Low Need Achievement, Hostile-Isolation and Total Disability in opposite directions for males and females. For boys, this relationship is parallel to the results for the Child Behavior Checklist indicating an association between externality and observed pathology. Conversely,

girls manifested an opposite, although nonsignificant, pattern of results.

Finally, Pearson correlations were computed to examine the relationship between social locus of responsibility and sociometric indices. A higher correlation of social locus of control was found with the peer rating procedure ($r = -.38$) than with positive ($r = -.27$) or negative ($r = .26$) sociometric nominations.

Discussion

The present study replicates the findings of Dahlquist and Ottinger (1983) that popular children are more internal in social locus of control than neglected and rejected children. These results further suggest that the social locus of control construct may also be effective in differentiating these extreme groups from average children. As with research on locus of control within the academic domain, the present study suggests the utility of conceptualizing attributions of causality as a domain specific construct rather than a generalized trait. Such a conceptualization may provide a more detailed, reliable and clinically useful analysis of these attributions (Lefcourt, 1982).

Based on the research completed thus far, it is unclear whether an external social locus of control is a causal contributor to peer rejection or whether an external orientation develops as a product of such rejection. Dodge (1980) reports that other children develop a reputational bias toward rejected children. This bias results

in a higher frequency of hostile behavior directed at rejected children than other sociometric groups, even in the absence of clear provocation. The observed external orientation by these rejected children, therefore may be an accurate reflection of their limited social control due to this reputational bias in other children.

Regardless of the origin of such an external orientation, the social locus of control construct appears relevant to the findings that rejected children do not problem-solve as efficiently or persistently as other children. An external orientation may partially explain the findings of Richard and Dodge (1982) that, while rejected children's first solutions to a social dilemma are rated equally effective as other's solutions, their subsequent solutions are rated significantly less effective and more inappropriate. Because rejected children have an external orientation and thus believe they have little control over social consequences, they may quickly "give up" their efforts to generate effective solutions and revert to more automatized, inappropriate (often aggressive) behaviors.

The present findings, in conjunction with Dahlquist and Ottinger (1983), have implications for clinical intervention. If social locus of control mediates the use of social problem-solving skills, then interventions should also focus on the modification of these external attributions of helplessness to facilitate the active use of problem-solving skills. The methods by which external social attributions in children can be modified, however, have received little attention.

Within the academic domain, Bradley and Gaa (1977) successfully modified locus of control in a five week goal-setting treatment in which students met individually with teachers to set academic goals for the next week and to make plans for the accomplishment of these goals. Similarly, Bolvin (1968) recommends active, self-directed involvement of students, combined with self-evaluation as methods of achieving greater internality in the academic domain.

Similar strategies may be applicable to interventions within the social domain. For example, use of self-statements (Meichenbaum & Goodman, 1969) that encourage problem identification, generation of alternative solutions and evaluation of outcome may be particularly useful (cf, Camp & Bash, 1981; Kendall & Finch, 1978). Conversely, exclusive use of behavioral techniques, while efficacious in the short-term, may reinforce the child's external orientation, thus limiting long-term maintenance of behavioral change and generalization to other social contexts. Clearly, further research on the impact of specific intervention techniques on social locus of control is needed.

The correlational results of the present study must be viewed as tentative and in need of replication. Because parent and teacher ratings were comprised of a disproportionately high number of children from extreme sociometric groups (i.e., popular and rejected), the obtained correlations may be artificially inflated. Nevertheless, the findings that external locus of control is significantly correlated with several internalizing types of pathology (e.g., depression,

somatic complaints, social withdrawal, hostile-isolation) among boys are consistent with past research indicating a positive relationship between an external orientation and low self-esteem (Smith et al, 1973). The finding that for boys externality is significantly related to delinquency but not aggression is somewhat surprising. The Delinquency subscale of the Child Behavior Checklist is primarily a measure of aggression directed at inanimate objects such as property. The Aggression subscale, however, is primarily a measure of hostility directed at other persons. One interpretation of this external-delinquency relationship is that external children tend to vent their frustrations in the context of inanimate objects, where they feel more control, rather than in the social context, where they feel little control. The significant relationship between externality and hyperactivity among boys replicates past research (Linn & Hodge, 1982).

The observed sex differences between social locus of control and subscales of both the Child Behavior Checklist and the School Behavior Checklist is consistent with past research (e.g., Bradlery & Teeter, 1977; Nowicki & Roundtree, 1971; Smith et al, 1973). One explanation of these results is that the consequences of not adequately controlling social outcomes may be more aversive and traumatic for boys than for girls, due to the higher level of competition and aggression manifested by male social groups (Whiting & Edwards, 1973; Whiting & Whiting, 1975). Further research is needed to more clearly delineate the nature of these sex differences and understand the

clinical implications for intervention directed at boys and girls respectively.

Finally, the finding that externality and frequency of positive sociometric nominations are moderately and negatively related is consistent with past research (Smith et al., 1973). The observed positive correlation between negative nominations and externality suggests the importance of considering both positive and negative dimensions of sociometric nominations when investigating the relationship between locus of control and peer social status. This is further supported by the correlation between peer rating and locus of control, which is stronger than the correlations for either the positive or negative nomination procedures taken separately.

References

Achenbach, T.M. (1979). The Child Behavior Profile: An empirically based system for assessing children's behavioral problems and competencies. International Journal of Mental Health, 7, 24-42.

Asher, S., & Hymel, S. (1981). Children's social competence in peer relations: Sociometric and behavioral assessment. In J.D. Nine & M.D. Smye (Eds.), Social competence. New York: Guilford Press.

Barclay, J.R. (1966). Sociometric choices and teacher ratings as predictions of school dropouts. Journal of School Psychology, 4, 40-44.

Bolvin, J.O. (1968). Implications of the individualization of instruction for curriculum and instructional design. Audiovisual Instruction, 13, 238-242.

Bradley, R.H. & Gaa, J.P. (1977). Domain specific aspects of locus of control: Implications for modifying locus of control orientation.' Journal of School Psychology, 15, 18-24.

Bradley, R.H., & Teeter, T.A. (1977). Perception of control over social outcomes and student behavior. Psychology in the Schools, 14, 230-235.

Camp, B.W., & Bash, M.A. (1981). Think Aloud Program manual. Champaign, Ill: Research Press.

Cowen, E.L., Pederson, A., Babigian, H., Izzo, L.D., & Trost, M.A. (1973). Long-term follow-up of early detected vulnerable children. Journal of Consulting and Clinical Psychology, 41, 438-446.

Crandall, V.C., Katkovsky, W., & Crandall, V.J. (1965). Children's beliefs in their control of reinforcements in intellectual academic achievement behaviors. Child Development, 36, 91-109.

Crandall, V.J., Katkovsky, W., & Preston, A. (1960). A conceptual formulation for some research on children's achievement development. Child Development, 31, 787-799.

Dahlquist, L.M., & Ottinger, D.R. (1983). Locus of control and peer status: A scale for children's perceptions of social interactions. Journal of Personality Assessment, 47, 278-287.

DiPietro, J.A. (1981). Rough and tumble play: A function of gender. Developmental Psychology, 17, 50-58.

Dodge, K.A. (1980). Social cognition and children's aggressive behavior. Child Development, 51,162-170.

French, D.C., & Tyne, T.F. (1982). The identification and treatment of children with peer relationship difficulties. In J.P. Curran and P.M. Monti (Eds.), Social skills training: A practical handbook for assessment and treatment. New York: Guilford Press.

French, D.C., & Waas, G.A. (1983). Behavior problems of peer neglected and rejected elementary-age children: Parent and teacher perspectives. Manuscript submitted for publication.

Kane, J.S., & Lawler, E.E. (1978). Methods of peer assessment. Psychological Bulletin, 85, 555-586.

Kendall, P.C., & Finch, A.J. Jr. (1978). A cognitive-behavioral treatment for impulsivity: A group comparison study. Journal

of Consulting and Clinical Psychology, 46, 110-118.

Lefcourt, H.M. (1982). Locus of control: Current trends in theory and research. Hillsdale, NJ: Lawerence Erlbaum Associates.

Lever, J. (1976). Sex differences in the games children play. Social Problems, 23, 479-487.

Linn, R.T., & Hodge, G.K. (1982). Locus of control in childhood hyperactivity. Journal of Consulting and Clinical Psychology, 50, 592-593.

Meichenbaum, D., & Goodman, J. (1969). Training impulsive children to talk to themselves: A means of developing self-control. Journal of Abnormal Psychology, 77, 115-126.

Miller, L.C. (1977). School Behavior Checklist. Los Angeles: Western Psychological Services.

Nowicki, S., & Roundtree, J. (1971). Correlates of locus of control in a secondary school population, Developmental Psychology, 4, 477-478.

Nowicki, S., & Strickland, B.R. (1973). A locus of control scale for children. Journal of Consulting and Clinical Psychology, 40, 148-154.

Richard, B.A., & Dodge, K.A. (1982). Social maladjustment and problem solving in school-aged children. Journal of Consulting and Clinical Psychology, 50, 226-233.

Roff, M. (1961). Childhood social interactions and young adult bad conduct. Journal of Abnormal and Social Psychology, 63, 333-337.

Roff, M., Sells, S.B., & Golden, M.M (1972). Social adjustment and personality development in children. Minneapolis, MN: University of Minnesota Press.

Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monograph, 80.

Smith, R.B., Tedeschi, J.T., Brown, R.C., & Lindskold, S. (1973). Correlations between trust, self esteem, sociometric choice, and internal-external control. Psychological Reports, 32, 739-743.

Spivack, G., & Shure, M.B. (1974). Social adjustment of young children. San Francisco: Jossey-Bass.

Spivack, G., & Shure, M.B. (1982). The cognition of social adjustment. In B.B. Lahey and A.E. Kazdin (Eds.), Advances in clinical child psychology, (Vol. 5). New York: Plenum.

Stengel, E. (1971). Suicide and attempted suicide. New York: Penguin.

Whiting, B.B., & Edwards, C.P. (1973). A cross-cultural analysis of the behavior of children aged 3-11. Journal of Social Psychology, 91, 171-188.

Whiting, B.B., & Whiting, J.W.M. (1975). Children of six cultures: A psychocultural analysis. Cambridge: Harvard University Press.

Table 1

Means and Standard Deviations for Scores on the

Social Locus of Responsibility Scale by Sociometric Status

Status	Mean	SD
Popular	4.38	2.25
Average	6.33	2.93
Neglected	7.31	2.81
Rejected	8.67	3.30

Table 2

Correlations Between the Social Locus of Responsibility Scale

and Subscales of the Child Behavior Checklist and School Behavior Checklist

Child Behavior Checklist			School Behavior Checklist		
Subscales	Males (N=33)	Females (N=41)	Subscales	Males (N=24)	Females (N=26)
Depression	.35*	.23	Low Need Achievement	.45*	-.15
Somatic Complaints	.30*	-.10	Aggression	.15	-.21
Social Withdrawal	.54**	-.02	Anxiety	.26	.14
Hyperactivity	.36*	.23	Academic Disability	.25	.17
Aggression	.17	.16	Hostile-Isolation	.53**	-.26
Delinquency	.33*	.20	Extroversion	-.24	.14
			Total Disability	.42*	-.14

*$p < .05$
**$p < .01$